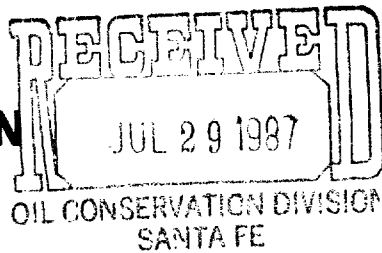




105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210

TELEPHONE (505) 748-1471



S. P. YATES
PRESIDENT
JOHN A. YATES
VICE PRESIDENT
B. W. HARPER
SEC. - TREAS.

July 27, 1987

Mr. William J. Lemay, Director
NMOCD
P.O. Box 2088
Santa Fe
N.M. 87501

Re: Request for Injection Pressure Limit Increase
SWDW State "CO" #1, K-36-19S-24E, SWD-285

Dear Sir:

Subject well was limited to an injection wellhead pressure of 1990 psi by Administrative Order SWD-285. As provided for under Rule 704-C, a step-rate test was conducted on July 9, 1987 on State "CO" #1 SWDW and witnessed by Mr. D. G. Moore of the Artesia OCD office. The test was conducted by B&D Well Testers of Hobbs, N.M. with bottom hole pressure bombs in the hole provided by Bennett-Cathey Wire-line Service of Artesia, N.M.. The results of the step-rate test shows no fracturing at 2825 psi. wellhead pressure while injecting at rates to 6.5 BPM. Copies of the service company reports are attached.

Yates Petroleum respectfully requests that the injection pressure limit for our SWDW State "CO" #1 be increased to 2825 psi.

Thank you.

Yates Petroleum Corporation
Eddie Mahfood-Sr. Engineer

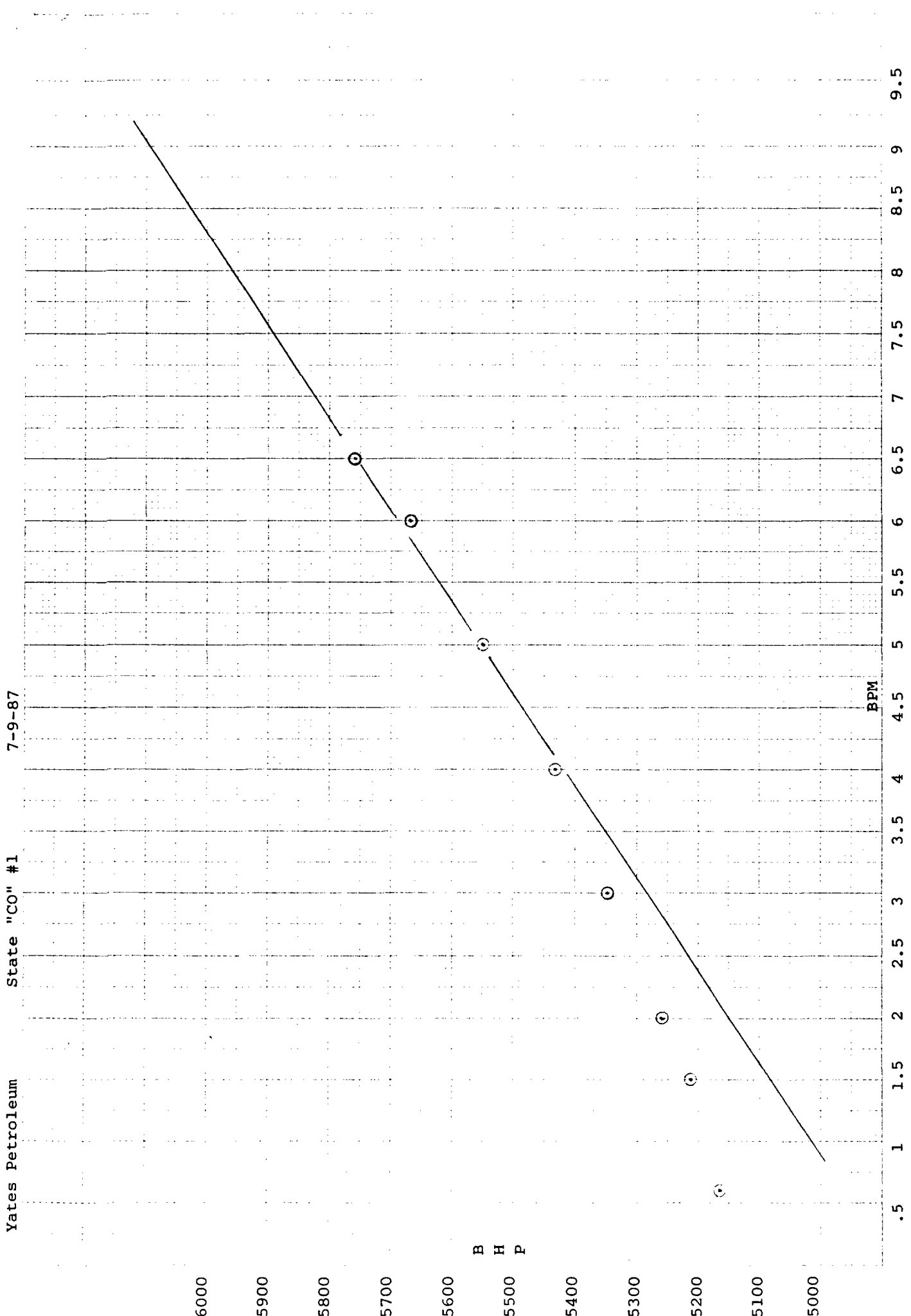
EM/gb

cc: NMOCD, Artesia

Step Rate Test

Hobbs, New Mexico 88240

Company Yates Petroleum							Unit K
Test Date 7-9-87							Lease State "CO"
Total Depth 11370 Plug Back TD Elevation							Well # 1
Csg size 5 1/2 Wt 23# d Set at Perfs: From 10038 To 11311							Sec 36 Twp-Blk19S Rge 24E
Tbg size 2 7/8 Wt N-80 d Set at Perfs: From To							County Eddy State New Mexico
Producing thru Packer set at 9984							Co. Rep
Time of Reading	Elap Time Hrs.	Well Information					Remarks
		Rate BBLS Per Minutes	Total BBLS Per Rate	Surface PSIG	Surface PSI Cor for Friction	BHP	
							Mid point 10674 Bomb @ 11000'
10:21				300		5131	on bottom @ 10:21
10:30	Start	- -		300			
10:35		.7		300			
10:40		.7		315			
10:45	:15	.7		320		5165	
10:50		1.5		410			
10:55		1.5		415			
11:00	:30	1.5		440	381	5212	
11:05		2.0		590			
11:10		2.0		600			
11:15	:45	2.0		610	429	5260	
11:20		3.0		850			
11:25		3.0		900			
11:30	1:00	3.0		950	516	5347	
11:35		4.0		1250			
11:40		4.0		1300			
11:45	1:15	4.0		1315	601	5432	
11:50		5.0		1800			
11:55		5.0		1810			
12:00	1:30	5.0		1825	717	5548	
12:05		6.0		2400			
12:10		6.0		2450			
12:15	1:45	6.0		2500	838	5669	
12:20		6.5		2800			
12:25		6.5		2810			
12:30	2:00	6.5		2825	928	5759	Stop pumping
12:31				740		5624	
12:35				600		5527	
12:40				500		5429	



Yates Petroleum State "CO" #1 7-9-87

• Surface PSI
⊙ Surface PSI corrected for friction

SURFACE
PSI

BPM

.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5 6 6.5 7 7.5 8 8.5 9 9.5

5000

4500

4000

3500

3000

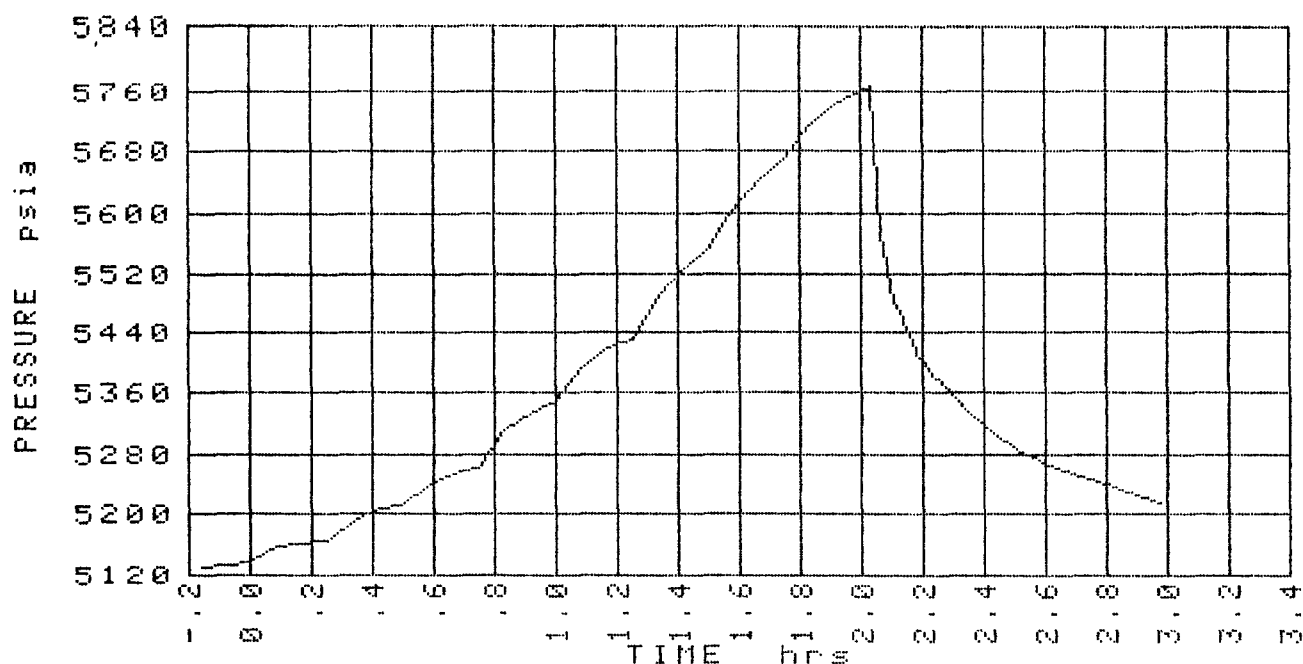
2500

2000

1500

1000

500



COMPANY: YATES PETROLEUM CORPORATION
 LEASE: STATE "CO" SWD
 FIELD:
 COUNTY: EDDY
 STATUS: STEP RATE TEST
 PERFORATIONS FROM: 0 ft
 DEPTH: 11000 ft

CONTACT: DARRELL ATKINS
 WELL: #1
 ZONE:
 STATE: NEW MEXICO
 OPERATOR: JOE HERNANDEZ
 TO: 0 ft
 TEMPERATURE: 220°F

ELEMENT# RP63#46915
 CLOCK# 21357
 ELEMENT# RP63#24374
 CLOCK# 21664

ELEMENT RANGE: 10150 psig
 CLOCK RANGE: 24 hrs
 ELEMENT RANGE: 12275 psig
 CLOCK RANGE: 12 hrs

START CLOCK	07/09/87	09:40:00	300 psig
SET ELEMENT	07/09/87	10:22:00	300 psig
WELL SHUT IN	01/10/01	00:00:00	0 psig
TEST ENDED	07/09/87	13:28:00	0 psig

GAIN= 1
 FILE: 138-CO:D701

BIAS= 0 psi
 BAROMETRIC PRESSURE= 13.2 psia

BENNETT-CATHEY WIRE LINE SERVICE
 PHONE (505) 748-3354
 ARTESIA, NEW MEXICO, 88210

PRESSURE TRANSIENT TEST DATA

COMPANY: YATES PETROLEUM CORPORATION
 LEASE: STATE "CO" SWD
 FIELD:
 COUNTY: EDDY
 STATUS: STEP RATE TEST

CONTACT: DARRELL ATKINS
 WELL: #1
 ZONE:
 STATE: NEW MEXICO
 OPERATOR: JOE HERNANDEZ

PERFORATIONS FROM: 0.0'
 DEPTH: 11,000.0' TO: 0.0'
 TEMPERATURE: 220.0°F

ELEMENT: RPG3#46915 RANGE: 10150 psig
 CLOCK: 21357 RANGE: 24 hrs
 ELEMENT: RPG3#24374 RANGE: 12275 psig
 CLOCK: 21664 RANGE: 12 hrs

SURFACE PRESSURE MEASUREMENTS

EVENT	DATE	TIME	DEAD WEIGHT PRESSURE
START CLOCK	07/09/87	09:40:00	300.0 psig
SET ELEMENT	07/09/87	10:22:00	300.0 psig
WELL SHUT IN	01/10/01	00:00:00	0.0 psig
TEST ENDED	07/09/87	13:28:00	0.0 psig

SUBSURFACE PRESSURE MEASUREMENTS

DATE	TIME	t hrs	GAUGE PRESSURE psig	ABSOLUTE PRESSURE psia	RESERVOIR PRESSURE psia
07/09/87	10:20:41	-.155	5,118.6	5,131.8	5,131.8
07/09/87	10:30:00	0.000	5,123.0	5,136.2	5,136.2
07/09/87	10:35:00	.083	5,145.8	5,159.0	5,159.0
07/09/87	10:40:00	.167	5,148.9	5,162.1	5,162.1
07/09/87	10:45:00	.250	5,152.6	5,165.8	5,165.8
07/09/87	10:50:00	.333	5,178.5	5,191.7	5,191.7
07/09/87	10:55:01	.417	5,195.1	5,208.3	5,208.3
07/09/87	11:00:00	.500	5,199.5	5,212.7	5,212.7
07/09/87	11:05:00	.583	5,224.8	5,238.0	5,238.0
07/09/87	11:10:00	.667	5,241.4	5,254.6	5,254.6
07/09/87	11:15:00	.750	5,247.0	5,260.2	5,260.2
07/09/87	11:20:01	.834	5,296.3	5,309.5	5,309.5
07/09/87	11:25:00	.917	5,317.3	5,330.5	5,330.5
07/09/87	11:30:01	1.000	5,334.6	5,347.8	5,347.8
07/09/87	11:35:01	1.084	5,379.0	5,392.2	5,392.2
07/09/87	11:40:01	1.167	5,408.0	5,421.2	5,421.2
07/09/87	11:45:01	1.250	5,419.1	5,432.3	5,432.3
07/09/87	11:50:00	1.333	5,475.9	5,489.1	5,489.1
07/09/87	11:55:05	1.418	5,511.7	5,524.9	5,524.9
07/09/87	12:00:00	1.500	5,535.7	5,548.9	5,548.9
07/09/87	12:05:00	1.583	5,590.0	5,603.2	5,603.2
07/09/87	12:10:00	1.667	5,628.3	5,641.5	5,641.5

BENNETT-CATHEY WIRE LINE SERVICE
 PHONE (505) 748-3354
 ARTESIA, NEW MEXICO, 88210

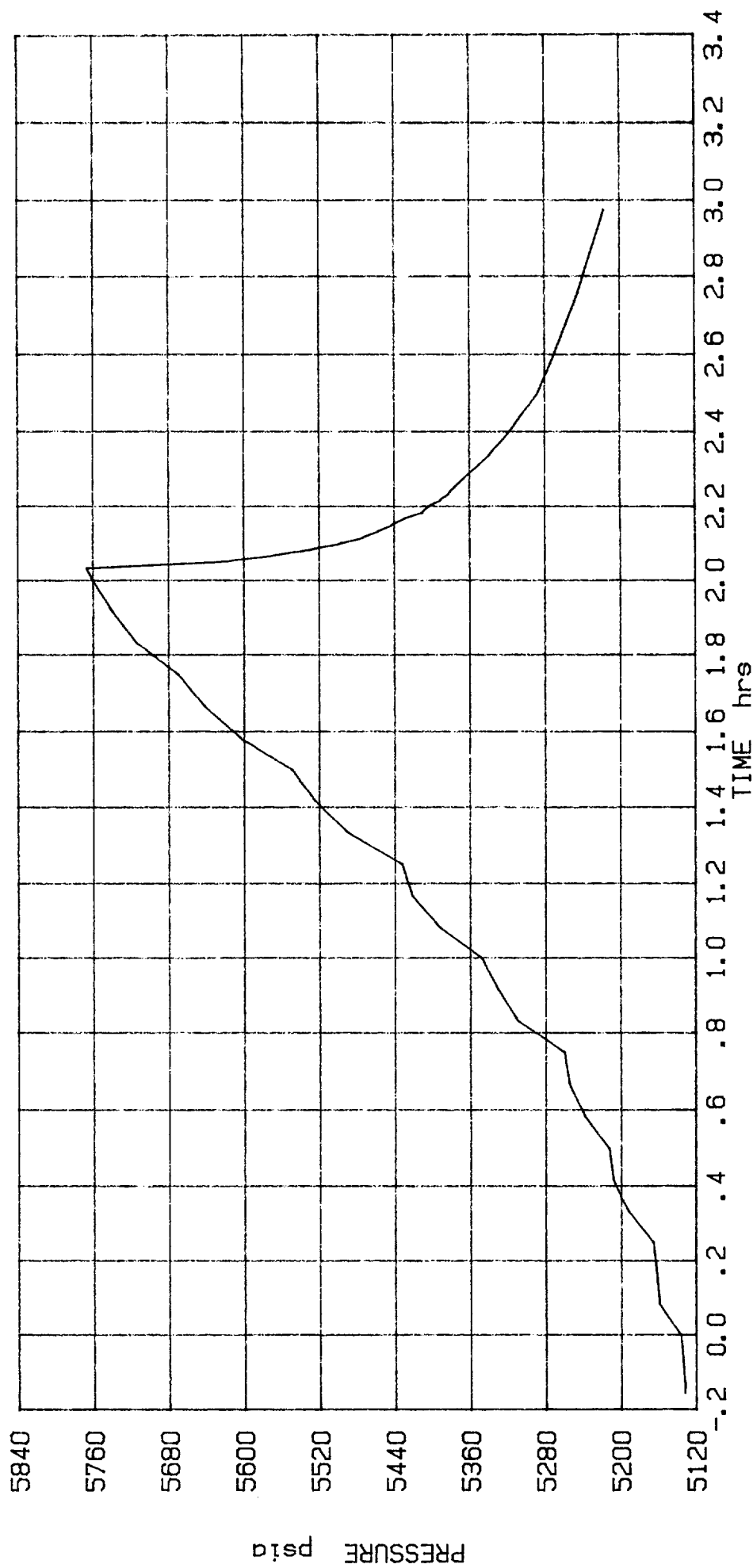
PRESSURE TRANSIENT TEST DATA

SUBSURFACE PRESSURE MEASUREMENTS

DATE	TIME	t hrs	GAUGE PRESSURE psig	ABSOLUTE PRESSURE psia	RESERVOIR PRESSURE psia
07/09/87	12:15:00	1.750	5,656.7	5,669.9	5,669.9
07/09/87	12:20:01	1.834	5,701.1	5,714.3	5,714.3
07/09/87	12:25:02	1.917	5,726.4	5,739.6	5,739.6
07/09/87	12:30:01	2.000	5,746.7	5,759.9	5,759.9
07/09/87	12:31:58	2.033	5,753.5	5,766.7	5,766.7
07/09/87	12:33:00	2.050	5,611.6	5,624.8	5,624.8
07/09/87	12:34:00	2.067	5,557.3	5,570.5	5,570.5
07/09/87	12:35:00	2.083	5,514.7	5,527.9	5,527.9
07/09/87	12:36:00	2.100	5,485.1	5,498.3	5,498.3
07/09/87	12:37:00	2.117	5,460.5	5,473.7	5,473.7
07/09/87	12:38:00	2.133	5,444.4	5,457.6	5,457.6
07/09/87	12:39:01	2.150	5,429.6	5,442.8	5,442.8
07/09/87	12:40:00	2.167	5,416.6	5,429.8	5,429.8
07/09/87	12:41:00	2.183	5,396.9	5,410.1	5,410.1
07/09/87	12:42:00	2.200	5,390.1	5,403.3	5,403.3
07/09/87	12:43:00	2.217	5,377.8	5,391.0	5,391.0
07/09/87	12:44:00	2.233	5,369.1	5,382.3	5,382.3
07/09/87	12:45:00	2.250	5,363.0	5,376.2	5,376.2
07/09/87	12:50:01	2.334	5,326.6	5,339.8	5,339.8
07/09/87	12:55:00	2.417	5,298.8	5,312.0	5,312.0
07/09/87	13:00:01	2.500	5,274.1	5,287.3	5,287.3
07/09/87	13:05:00	2.583	5,259.3	5,272.5	5,272.5
07/09/87	13:10:01	2.667	5,245.7	5,258.9	5,258.9
07/09/87	13:14:59	2.750	5,232.2	5,245.4	5,245.4
07/09/87	13:28:30	2.975	5,203.2	5,216.4	5,216.4

TEST DATE: 07/09/87 TO 07/09/87
TEST DEPTH: 11000 ft
ELEMENT NO: RPG3#24374
RANGE: 12275 psig
CLOCK: 21664
RANGE: 12 hrs
OPERATOR: JOE HERNANDEZ

DARRELL ATKINS
YATES PETROLEUM CORPORATION
STATE "CO" SWD #1
BENNETT-CATHEY WIRE LINE SERVICE
Box 787 Artesia, N.M. 88210 (505) 748-3354



ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION



GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

August 11, 1987

Yates Petroleum Corporation
105 South Fourth Street
Artesia, NM 88210

Attention: Eddie Mahfood

RE: Injection Pressure Increase
State "CO" Well No. 1
Eddy County, New Mexico

Dear Sir:

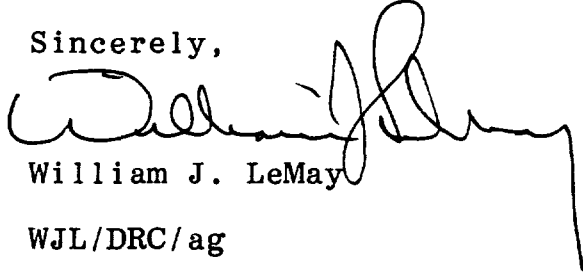
Reference is made to your request dated July 29, 1987, to increase the surface injection pressure on your State "CO" SWD Well No. 1. This request is based on a step rate test conducted on the well on July 9, 1987. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on this well is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following well.

<u>WELL & LOCATION</u>	<u>MAXIMUM INJECTION SURFACE PRESSURE</u>
State "CO" Well No. 1 Unit K, Section 36, Township 19 South, Range 24 East, NMPM Eddy County, New Mexico	2825 PSIG

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely,

A handwritten signature in black ink, appearing to read 'William J. LeMay', with a long horizontal flourish extending to the right.

William J. LeMay

WJL/DRC/ag

cc: OCD-Artesia
D. Catanach
D. McDonald
✓File - SWD-285